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U. S. Forest Service Photo

Musser Forests

Incorporated

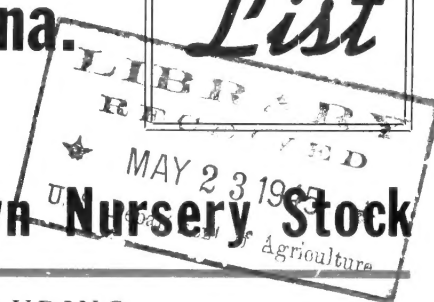
Indiana, Penna.

Growers of
Northern Grown Nursery Stock

1945

SPRING
PLANTING

List



INCLUDING

Christmas Tree Growers' Guide

GIANTS OF THE FOREST

One of the greatest heritages of this nation was the wealth of virgin timber. The "Big Trees" of the west shown in this photograph are fast disappearing, along with the best of the eastern forests. In not so many years, virtually all our wood products must derive from PLANTED TREES. Development of forests will inevitably become an agricultural pursuit next in importance to the production of food, as older countries than ours have learned.

Trees Planted Now WILL RESTORE AMERICA'S

9 points for the land-owner:

FOREST STRENGTH

- 1 — Idle land is wasted opportunity. Thousands of acres of land in the United States are lying idle, which could be put to work earning money for you by planting them with healthy, selected Musser Tree Stock.
- 2 — After planting, seedling trees require no cultivation or care. 85% to 95% of planted trees grow to maturity.
- 3 — Reforested land increases in value at the rate of at least \$10 per acre per year. 30-year-old pine timber is worth at least \$300 per acre (estimating only 300 trees per acre at \$1 each).
- 4 — Trees can be insured against fire at a nominal rate.
- 5 — Christmas Trees are a profitable by-product of a forest plantation; they are produced by the necessary thinning of the planting. There is an exceedingly rich market for Christmas Trees. Planted evergreens are most wanted and command highest market prices.
- 6 — \$1000 invested to plant a 50-acre tract will be worth at least \$15,000 for timber in 25 to 30 years, not considering Christmas Tree profits reaped in the meantime.
- 7 — There are no restrictions on the sale of trees or timber grown from Musser Stock.
- 8 — Reforested land is practically tax-free in many states.
- 9 — Land planted with trees and insured against fire is the finest insurance policy for your estate.

RE-FOREST

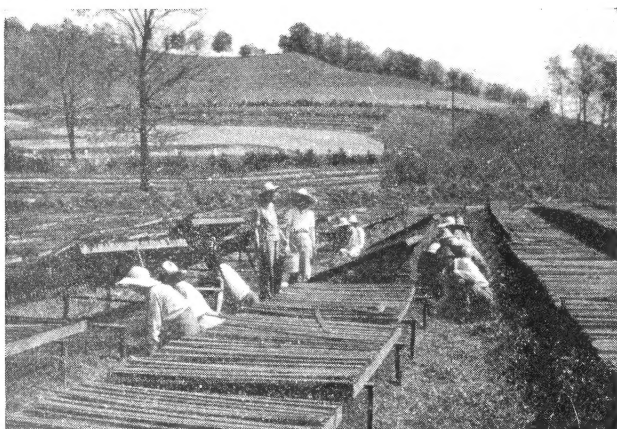
with

Musser Trees

Be Sure . . . Plant MUSSEY TREES . . . That Grow!



Seed Bed Preparation
Finest equipment used to properly prepare nursery soil.



An Endless Task — Weeding Tree Seedlings

Scientifically Produced

Under Controlled Conditions

For a number of years our Chief Horticulturist has worked on the development of a more perfectly balanced seedling tree—that is, a tree with healthier leaves, stronger stems, and, above all, a **LARGER** and **STURDIER** ROOT SYSTEM.

FIRST—by the selection of A-1 seed that must pass a series of tests developed in our laboratories. Low vitality seed is discarded before planting.

SECOND—by the application of scientific methods of seed bed preparation — constant testing of soils, development of new food formulas required by different species of trees.



Ponderosa Pine

The above photograph shows an excellent specimen of the fully grown Ponderosa. The straight trunk, sparsely branched, is certain evidence of a splendid timber tree. Can be grown in all parts of the country.



Ponderosa Pine

One of the western pines, Ponderosa is a very good species for timber plantations. Possesses long green needles. It will grow well in any soil. Noted for its fast growth. Suitable for windbreaks, etc.

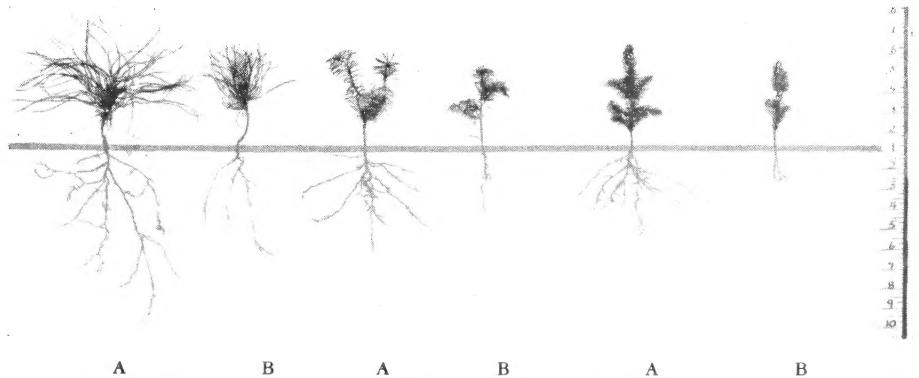


Scotch Pine

Rapid growing; light gray-green foliage. Will grow in poor soil and under adverse conditions. This species, first to be planted extensively for Christmas trees, is well established in markets. Also used for windbreaks, shelter or developed into beautiful specimen trees for the home.

THIRD—weekly checks of all seedlings, studying the root development, color, height and growth. Every factor in the life of the tree is considered.

RESULTS—We can proudly offer to our customers a stronger, healthier tree with a root system that permits trees to be transplanted with a smaller percentage of loss.



Two Year Seedlings above show the startling results of Musser Scientific Culture. Trees marked A were given full benefit of treatment as described herein; trees marked B "just grew." They were all raised in beds side by side. Note sturdy root structure of "A" trees.

Other conditions equal, seedlings with

The Strongest Root System

will produce the Strongest, Sturdiest, and Fastest Developing adult tree — and will bring profit quicker.

Glance at the photo above—note amazing difference in Musser stock.



SEED FOR MANY SPECIES SCARCE



Under war time conditions, tree seed is very scarce. Some species are unobtainable. With considerable difficulty, we are securing small quantities of Certified Seed from the old established forests of Europe, and from the finest strains of domestic trees.

Since we are determined to maintain the Musser Standard of Quality for tree seedlings, we can thus no longer offer unlimited quantities on all items of our forest tree stock.

If possible, plan your tree planting a year ahead. Write us if you have any special problem.



Transplanting—Thousands of Musser Seedlings are transplanted each year for better root growth.

GROW CHRISTMAS TREES! — See Page 9



Austrian Pine

Stands out on account of its heavy, bushy form. An excellent tree for windbreaks, screens, and for single specimens. It is a rapid growing species, but prefers good soil. One of the most beautiful Christmas trees.



White Pine

A very valuable timber species native to eastern United States. Of high ornamental value, having soft, light-green foliage, typified by distinct whorls of branches. Best growth attained in good, well-drained soil and in full sunlight. One of the popular Christmas trees.



Norway Spruce

One of the most widely used of the cultivated evergreens. Short, shiny, dark green needles, thick foliage and strong branches. Excellent for windbreaks, hedges, shelters and home. Popular Christmas Tree.

WHITE SPRUCE

Needles bluish-green, with aromatic odor when crushed. Hardy, highly ornamental.

Trees Planted **TODAY** *protect* **THE FUTURE!**



Informal arrangement of Planted Evergreens. Handsome Douglass Fir in foreground.

Community Forests

In New England, and increasingly in other parts of the United States, towns and counties are investing in forest plantations as a permanent and guaranteed source of income. Some communities have entirely eliminated local taxes, profits from forest products paying all expenses. Scientific culture insures continuous value to the forest.

SEE

"Christmas Trees as a Cash Crop"

ON PAGE 9

Let nature work for you! Salable Christmas Trees can be produced in from five to eight years — without cultivation and on land not usable for other purposes.

Plant **MUSSER TREES** *grown from* **CERTIFIED SEED**



Black Hills Spruce

Highly ornamental Spruce, with rich, dark green foliage. Grows with a dense, even, pyramidal form, with gracefully dipping branches. Requires good rich soil for proper development.



Sitka Spruce

Very much like Norway Spruce except that it is faster growing. This tree is a native of Alaska, but has become acclimated to more temperate climates.



CANADIAN & CAROLINA *Hemlock*

Lacy, graceful foliage. Prefers shade, but will live in full sunlight. Desires moist soil. Excellent ornamental, since it may be pruned to any shape and kept at small size. Unsurpassed for hedges, mixed plantings, or specimens. Thrives in shade where other ornamentals will not grow. Canadian Hemlock has shorter, darker needles.

Windbreaks

As well as making a very beautiful addition to any farm or country home, a Windbreak serves the very practical purpose of protecting against damage and loss to property by the elements. Any species of Pine is especially suitable for development of a Windbreak, due to its rapid growth.

Farm Woodlots

Untillable land can be devoted to a woodlot furnishing a perpetual supply of firewood and utility lumber.. The trees will also serve as a protection for live stock.



This fine Scotch Pine Windbreak could have been developed from any of our Pines.



Thousands of 2-year Pine Seedlings in our nursery beds.

Parks and Playgrounds

Far-seeing community leaders plan for shaded playgrounds and beautiful, cool parks for summer enjoyment. An abundance of trees will make a desirable residential district, and will help to maintain real estate values. Invariably the presence of trees on a lot or on a street increases the land's desirability and thus, its cash value.



Douglass Fir

A fairly long needle fir, grayish-green in color. Highly ornamental. A good soil is desirable, but is not required, for this species. It will do well in open sunlight or partial shade. A popular Christmas tree.

Let Nature Work For You

*Salable Christmas
Trees grown in 5
to 8 years.*

See
Christmas Tree Guide
PAGE 9



European and Oriental Larch

Bright green feather foliage. Deciduous, prefers moist soils. Slender, pyramidal form. Very fast growing. Excellent timber tree, used for poles, masts, etc. Beautiful ornamental where height is acceptable.

PONDEROSA PINE

Per 100 Per 1000

3 yr. Seedlings	(3-0)	4-8 in.	3.00	15.00
4 yr. Seedlings	(4-0)	6-14 in.	3.60	18.00

SCOTCH PINE

2 yr. Seedlings	(2-0)	4-6 in.	6.00	
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AUSTRIAN PINE

3 yr. Seedlings	(3-0)	6-12 in.	6.00	
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WHITE PINE

2 yr. Seedlings	(2-0)	2-4 in.	3.00	15.00
3 yr. Seedlings	(3-0)	4-6 in.	5.00	25.00

BANKS PINE

FASTEST GROWING CHRISTMAS TREE

2 yr. Seedlings	(2-0)	4-10 in.	3.00	15.00
(Best Planting Size for Banks)				

SPECIAL AMERICAN RED PINE

2 yr. Seedlings	(2-0)	2-4 in.	2.40	12.00
3 yr. Seedlings	(3-0)	5-8 in.	3.20	16.00
3 yr. Transplants	(2-1)	3-5 in.	8.00	40.00
(3-year stock recommended for Red Pine)				

NORWAY SPRUCE

4 yr. Transplants	(3-1)	3-8 in.	10.00	50.00
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BLACK HILLS SPRUCE

2 yr. Seedlings	(2-0)	2-3 in.	2.40	12.00
3 yr. Seedlings	(3-0)	3-4 in.	3.00	15.00
(3-year stock recommended for Black Hills Spruce)				

WHITE SPRUCE

2 yr. Seedlings	(2-0)	2-3 in.	2.40	12.00
6 yr. Transplants	(3-3)	6-14 in.	16.00	80.00

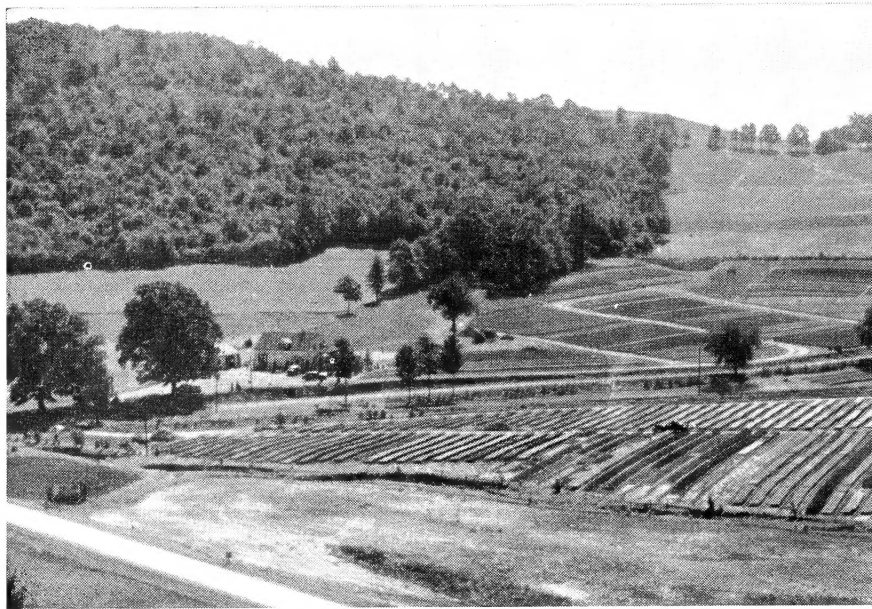
SITKA SPRUCE

4 yr. Seedlings	(4-0)	6-12 in.	3.00	15.00
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Musser Forests, Inc.
Indiana, Pennsylvania

Spring,

NOTE that certain species are offered in 100 l



Aerial view of section of our nursery producing 14,000,000 Forest, Xmas T

Terms: NO ORDER CAN BE ACCEPTED FOR LESS THAN UNITS OF 50 OF ONE VARIETY AND SIZE. Orders will be booked with one-half cash with order, balance C. O. D. Fifty of one kind and size at the 100 rate; 500 of one kind and size at the 1000 rate. *Prices subject to change without notice.*

Shipping: All prices F. O. B. Indiana, Pa. INCLUDE 50¢ for PACKING CHARGES on orders of less than 1000. No packing charges on orders of 1000 or more. We will ship Express C. O. D. for the shipping charges unless otherwise specified. We will do our best to ship stock to arrive at destination on a specified date. However, due to varied weather conditions during our shipping season, WE CANNOT GUARANTEE ALWAYS TO HAVE TREES AT DESTINATION ON A DEFINITE DATE. All stock that we ship is of the highest quality and is carefully packed by experienced men; it should arrive in good condition. If planting instructions are carefully followed, good results can be expected. However, we cannot be responsible for unfavorable weather conditions or improper planting and therefore give no guarantee either express or implied. Trees are shipped in dormant condition and may be planted safely in any part of the country. If properly heeled in they may be kept several weeks.

Explanation of List: The figures 2-0, 2-1, 2-2-1 indicate the number of years the trees have been in the seedbeds and the transplant beds. The first figure indicates the number of years in the seedbed. A dash followed by a figure indicates a transplanting. The second figure is the number of years in the first transplant bed, the third figure the number of years in the second transplant bed. Thus the sum of all figures is the total age of the tree.

Banks Pine

The Fastest Growing Xmas Tree

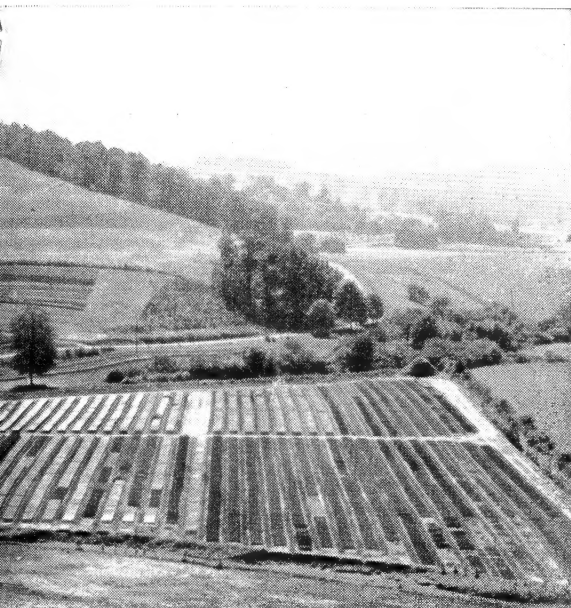
This tree is light green in color, and grows straight and tall with a narrow spread of branches, which makes it especially suitable for use in the small home or city apartment. Its softly curving needles are the shortest of all the pines, and, for this reason, most nearly resemble the spruces and firs in appearance. At the same time it has the superior advantage of holding its needles for several months. Its pleasing fragrance is a notable characteristic. Many Banks Pine, at Christmas tree size, have an abundance of cones which make them especially attractive.

This tree thrives in all climates and all types of soil—rich or poor. It is valuable for small timber products. Since it is the most rapid growing of all the pines, it must be sheared to produce a fine compact tree.



1945 Planting List

ts only. Wartime conditions caused shortages.



OFFICE:

515 Philadelphia
Street
Indiana, Pa.

Phone:
4 2 2

NURSERY:

On Clymer Road,
Route 80
7 miles north of
Indiana, Pa.

Phone:
4 1 2 2 - 1 4

e and Ornamental seedlings and transplants yearly.

Special Offer

50 - Colorado Blue Spruce - \$3

Four Year Old Healthy Trees, 4 to 8 inches high — sent post-paid at proper planting time. NO C. O. D.'s on special offer.



AMERICAN Red Pine

Quality Timber and Xmas
Tree

The American Red Pine is favored for its beautiful deep green color, and long, soft, needles. It is a moderately fast grower, producing heavy branches and straight stems. It is hardy in practically all climates, and thrives in rich or poor soil where sunlight is provided.

This species produces excellent timber and, at the same time, provides Christmas trees of very fine quality. Red Pine has been well received in the Christmas tree markets for years, and many dealers demand this variety exclusively. Due to its compact growth habits, only about 50% of a Red Pine planting requires shearing, and the remaining trees need less pruning than other varieties. From our own experience, we cannot recommend American Red Pine too highly.

SPECIAL COLORADO BLUE SPRUCE

Per 100 Per 1000

2 yr. Seedlings	(2-0)	2-4 in.	2.00	10.00
3 yr. Seedlings	(3-0)	3-5 in.	3.60	18.00
4 yr. Transplants	(3-1)	4-8 in.	8.00	40.00

BLUE SPRUCE

4 yr. Seedlings	(4-0)	4-8 in.	4.40	22.00
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CANADIAN HEMLOCK

4 yr. Seedlings	(4-0)	6-12 in.	8.00	
4 yr. Transplants	(3-1)	6-8 in.	10.00	

CAROLINA HEMLOCK

4 yr. Seedlings	(4-0)	6-12 in.	8.00	
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DOUGLAS FIR

2 yr. Seedlings	(2-0)	3-8 in.	3.60	18.00
4 yr. Seedlings	(4-0)	6-10 in.	5.00	25.00

ORIENTAL LARCH

4 yr. Seedlings	(4-0)	14-24 in.	6.00	30.00
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EUROPEAN LARCH

4 yr. Seedlings	(4-0)	14-24 in.	5.00	25.00
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UPRIGHT and SPREADING YEW

5 yr. Transplants	(4-1)	4-8 in.	50.00	
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PYRAMIDAL ARBORVITÆ

4 yr. Seedlings	(4-0)	5-12 in.	15.00	
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AMERICAN ARBORVITÆ

2 yr. Seedlings	(2-0)	2-3 in.	4.00	20.00
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ORIENTAL ARBORVITÆ

4 yr. Seedlings	(4-0)	7-14 in.	8.00	40.00
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BARBERRY

2 yr. Seedlings	(2-0)	3-6 in.	3.00	
3 yr. Seedlings	(3-0)	8-18 in.	4.00	

SPECIAL COLORADO

Blue Spruce

The King of Ornamentals

Colorado Blue Spruce has long been regarded as one of the finest of ornamental trees. It is sturdy, symmetrical and compact in form, ranging in color from slightly blue-green to marvelous blue. It thrives in moist rich soil and prefers sunlight. Growth is slow. The blueness of these trees may be intensified by carefully working a thin layer of well rotted cow manure into the surface of the soil around the tree, and watering frequently. Care should be exercised in the use of this fertilizer; burning may result from over-feeding.

While this species is primarily used in ornamental plantings, it offers the highest quality in a Christmas tree. Thus it is often advisable to include a quantity of Blue Spruce in a plantation for special premium trees. Shearing is recommended, following a season of unusually rapid growth.



PLANTING INSTRUCTIONS

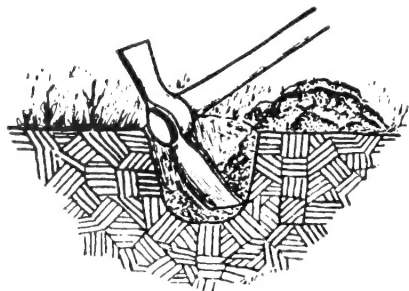
When to Plant

Spring planting season is from March 15 to June 1. Fall planting is quite satisfactory when larger transplant stock is used, and when the site is fairly dry. Never attempt to plant in the fall on moist sites as the trees will be heaved out of the ground by the action of the frost on the soil. Fall planting season is September 1 to Nov. 1, or before the ground freezes.

Preparations for Planting

It is not necessary to prepare the soil in any way before planting. Plowing before planting often allows too much settling after planting, leaving the trees lying upon the surface. Sod and weeds in the planting site conserve moisture, and shade the young trees during the hot months of the first few seasons after planting. Do not fertilize before, during or immediately after planting as the fresh fertilizer invariably burns the tender roots. Fertilizer as a top dressing around the trees may be added several years after planting if desired.

When your trees arrive **UNPACK AT ONCE**. This is very important. While trees are out of the ground they must be handled very carefully. Do not expose the roots to sunlight or drying winds, or the trees will be seriously injured or killed. Dig a trench deep enough to accommodate the roots and long enough to hold the trees. This trench should be near the planting site in a shaded location such as the north side of a building or woods, and accessible to water if possible. Your trees will come packed in crates or cartons with the roots wrapped in moist moss and the tops dry. Remove all of this



(A) Dig large holes.

Spacing

Where thinning is to be done at a comparatively young age (4 to 5 years) as with a Christmas Tree plantation, spacing is 3' by 3' for Spruce or 5' by 5' for Pines. With a forest plantation when no thinning is intended for 20 to 25 years, 6' by 6' or 8' by 8' is recommended.

Number of trees required per acre for different spacings:

3 x 3 — 4,840

5 x 5 — 1,742

4 x 4 — 2,722

6 x 6 — 1,210



(B) With tree in place partly fill the hole, then pack before final filling.

Experienced Crews can plant an average of 1000 trees per man per day.



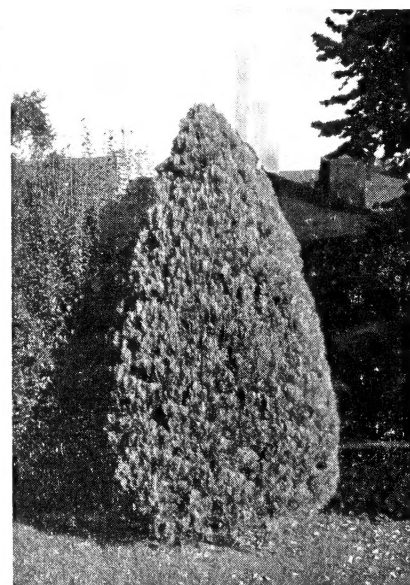
Pyramidal Arborvitae

Columnar shaped tree, which has always proven very popular for all types of formal planting. Grows from 15 to 20 feet. This tree requires rich, moist soil. Foliage is of rich, green color.



American Arborvitae

American Arborvitae, sometimes known as White Cedar, is one of the most popular choices for home planting. Foliage is dark green. Since trees may be pruned back to any height, this plant is adaptable to many uses. Excellent for hedges, windbreaks, mixed plantings, specimens. Prefers moist soil.



Oriental Arborvitae

This tree is a very popular choice for formal plantings. It is often used as an accent for points of interest in all types of ornamental planting. The culture is similar to that of other types of Arborvitae.

packing material and place the bundles of trees in the trench, packing **LOOSE** soil tightly around the roots so that air is excluded. If the soil is dry, water them after "HEELING-IN." When planting carry a few bundles of trees in an ordinary water bucket with the roots immersed in thick, soupy mud. This mud mixture will adhere to the roots, and while planting will dry slightly on the surface conserving the necessary moisture in contact with the root itself

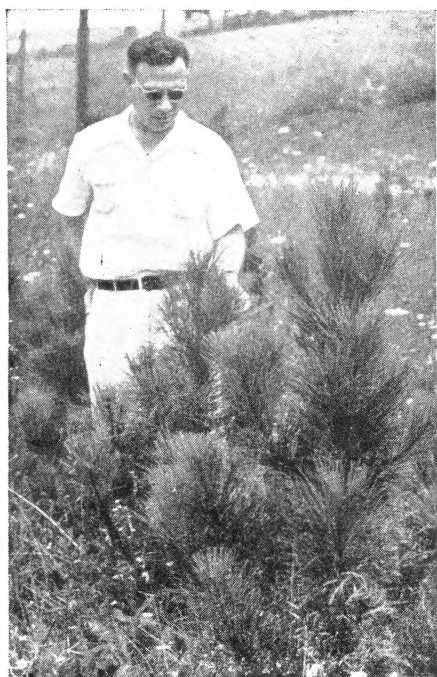
How to Plant

A mattock is the best tool for tree planing. Dig a hole deep enough to accommodate the roots, and large enough to allow for spreading out the roots. See Figure A. Next take a tree from the bucket and place it in the hole so that when the hole is filled the tree will stand as deep or preferably 1/2 to 3/4 inches deeper than it was in the nursery. Spread out the roots as much as possible, never curl them up in a ball. Then fill the hole partially and pack soil firmly about the roots with hand or mallet. Then fill the hole completely, leaving a slight depression to catch rain water. Avoid using stones and pieces of sod in filling the hole as these make air pockets that are detrimental to the successful establishment of the seedling. Careful spreading of roots, and tight packing of good soil around the roots will insure success with planting.

Crew Organization

Planting small tracts three men work together. One man goes ahead and digs the holes, the other two follow with buckets of trees and plant them in the holes. In planting more extensive tracts ten men will work to the best advantage. Three men go ahead in a parallel line digging the holes. Two planters follow each digger setting the trees. The tenth man follows the crew with two buckets of trees and replenishes the planters' buckets as necessary; also to observe that no more than one tree is planted in each hole, to watch spacing, to see that trees are planted properly, and to keep the crew going as rapidly as possible.

Christmas Trees AS A CASH CROP



Fred Musser, developer of the proven Musser Culture for Tree Seedlings, examines a fine 4-year-old specimen of American Red Pine — only two more years to go for best Christmas tree marketing.

Over 40,000,000 Christmas Trees used in the U. S. each year. • Original sources rapidly decreasing, with quality more inferior. • Average wholesale price for years, 50¢ per tree.

General Considerations

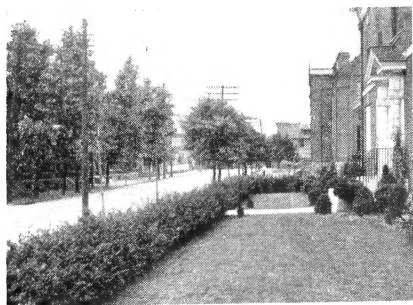
For the past 20 years we have been growing and shipping Christmas Trees. We have shipped large quantities to most of the important markets in eastern United States. The business of growing Christmas Trees is in its infancy.

Some people have the mistaken idea that there will soon be an over-production of Christmas Trees. During the past number of years, we have inspected practically every source of supply of Christmas Trees in the United States and Canada. We have made a thorough study of the markets and the demand for *quality* trees. From our experience, we are convinced that there will be a very good market for high grade Christmas Trees for a great many years to come. The market for select, *planted Pine* trees is practically unlimited. Although in the past, Spruce and Fir trees have been generally used for Christmas Trees, *planted Pines* are rapidly replacing them. *All Pines* are much faster growing than Spruce. *All Pines* retain their long needles and fresh appearance for months after being cut, whereas the short needled trees which are commonly shipped in, begin to shed within a day or two after being decorated.

We offer in these pages some of the information we have gathered from our own experience. Although we have a large acreage growing Christmas Trees, we know that *all* we can possibly produce will not fill even a small part of the demand for quality trees. For this reason, we do not hesitate to furnish to anyone any information that we have gathered over a long period of years. The custom of using Christmas Trees

PLANTING COST on inferior stock is as high as for High Grade Musser Stock.

Plant the Best!



Barberry

A sturdy thorned shrub, well known, and widely used for hedges. Bears bright red berries in fall, which cling on through the winter, adding beauty to utility. Barberry is very hardy.

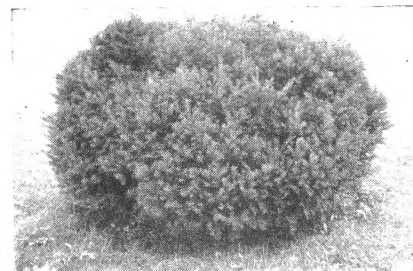


Upright Yew

Unexcelled ornamental—deep rich green color. Grows in sun or shade. Used successfully for shaded lawns where many ornamentals will not grow. Has a naturally beautiful cone shape.

See —

Special Offer
on Page 7



Spreading Yew

The characteristic spreading growth of this well known ornamental lends itself superbly to development of masses of velvety dark green foliage. Beautiful as individual specimens. Grows in sun or shade.



Scotch Pine plantation seven years old and ready to be cut.

started a great many years ago and will undoubtedly continue in both good and bad times.

Species

The most desirable species to plant for Christmas Trees depends upon several factors. First, and probably most important to be considered, is the quality of the soil; second, is the local demand for a certain species of tree; and third, is the question of economy of production.

► **Pines** are generally considered to include all the long needled varieties of Christmas trees. They can be most economically produced of all planted trees. (1) Their hardiness enables them to thrive on hilly, stony or poor land which is unsuited for other agricultural purposes. (2) They flourish in practically all climates. (3) Most varieties will tolerate low moisture content. (4) Their growth is more rapid than that of any other tree used for this purpose, allowing them to be marketed within 5 to 8 years after planting. (5) They require no cultivation.

Although comparatively new on the market, they are becoming more popular each year. Their advantages over wild trees are so outstanding that customers demand them in any markets where they are available.



Bundled Christmas Trees leave plantation by team and wagon. Standing trees will be left for timber.

- (1) All pines hold their needles for several months after being cut.
- (2) If seedlings grown from the best strains of seed are used, beautiful, compact, premium trees are produced.
- (3) Pine trees always present a fresh appearance and pleasant fragrance.
- (4) Due to the heavier branches, this type of tree is especially easy to decorate.

Trees of this type will always command the highest prices. *Banks, Red, Scotch, Austrian* and *White Pine* are the species most often planted for Christmas Trees. While they require no cultivation, it has been found that when planted in particularly good soil, they will grow too fast to develop into bushy, symmetrical trees. Under these conditions pruning or shearing is often desirable in order to produce quality trees. This is a simple procedure which is explained later.

► **Spruces** are characterized by short, shiny needles, and, when properly spaced, develop thick foliage and heavy branches. Various types of Spruce have been offered on the Christmas Tree markets for years. These have been wild trees taken from the northern woods, and, in general, are very much inferior to planted trees. Because they grow too close together and do not receive sufficient sunlight, they are often spindly, open and one-sided. However, bushy symmetrical, quality Spruce will always be very much in demand as living and cut Christmas Trees as well as for ornamental use. They will also command premium prices.

Norway and *White Spruce* are the varieties usually preferred for Christmas Tree planting, although *Blue Spruce*, while slower growing, is unsurpassed for beauty.



Two stages in the process of bundling trees with the "Musser Christmas-Tree Baler" for the wholesale market. Trees are bundled, one to six trees per bundle, according to size.

Spruce will grow in all temperate climates. It requires rich moist soil and normal drainage. It can be grown successfully in partial shade or full sunlight. The species are slower growing than the Pines, requiring 7 to 10 years to reach marketable size.

Due to the fact that the needles begin to shed within a few weeks after cutting, *Spruce* cannot be harvested for Christmas Trees too early. It is easily bundled, and does not require pruning, except following seasons of unusual growth. All varieties may be used for Christmas Trees.

► **Firs** are short needled and somewhat similar to the Spruces in appearance, although they may be distinguished by their flat needles and upright cones. They prefer moist soil which is kept cool by shading from the sun. *Douglas* and *Balsam* have been used as Christmas Trees for years. *Balsam* is particularly favored for its delightful fragrance. The facts related above as to the handling of Spruce apply to *Firs*, except that *Firs* should be planted in the extreme northern states *only*.

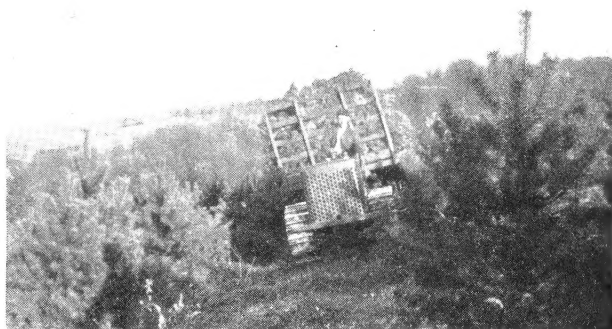
Plant Several Species

A mixture of species in the same plantation is the most desirable method of planting. With a variety of species to offer, you will undoubtedly make additional sales. Also different species have different rates of growth, making it possible to harvest more crops from the same plantation.

We would suggest a planting of 70% Pines, and 30% Spruces. You may have several varieties of both species, depending on your particular soil and climate conditions. You will find it will pay you well when marketing time comes.

Preparation of the Planting Site

We recommend no preparation of soil before planting. The added expense is usually not justified, and often a *light* growth of grass and weeds is actually beneficial to the growth of young trees since they offer shade and moisture retention during the early stages of the plantation. If you intend to cultivate your trees after planting it will be necessary to plow the site first.



Efficient production methods increase profits from your Christmas tree Plantation.

Planting

When growing trees are spaced too closely together, they crowd, and the resulting competition speeds up the height growth but tends to make the trees thin and thus poor Christmas Trees. The best shaped trees will be grown by spacing far enough apart that they do not interfere with each other. However, it is economical to speed up the growth somewhat, and it is advisable to utilize all the land. Through years of experimenting we have arrived at an average spacing of 3 to 4 feet for Spruce and 4 to 5 feet for Pines as being best for all Christmas Tree plantings. Planting is done as with any forest trees. Directions appear on page 8 of this Planting List.

Pruning or Shearing

Pruning or shearing is recommended for all varieties of *Pine* Christmas Trees. It develops a solid, extra heavy branched and bushy tree. This procedure will produce a premium tree that will command the very highest prices. Pruning is done at about the fourth year, and *before* the *new, tender growth* starts to get tough and woody. It is usually done between June 1st and July 31st. Pruning is an easy thing to do. One man using long shears can prune at least 50 trees per hour. Trim off about $\frac{1}{2}$ the *new* growth made during one season. Later in the season many new buds will form which will produce many more branches the following year. Shape the tree to a symmetrical form as indicated in diagram on this page.

Except for pruning, no care or cultivation is necessary.

Harvesting

The trees of a Christmas Tree plantation do not all arrive at merchantable size the same year. As soon as some are of suitable size they should be cut and marketed. The following year more will be ready. Where much land is available it is a good plan to combine reforestation with the Christmas Tree cutting. Under this system you will plant a new tract each year, and as they become of age to harvest, cut only 50% of the trees

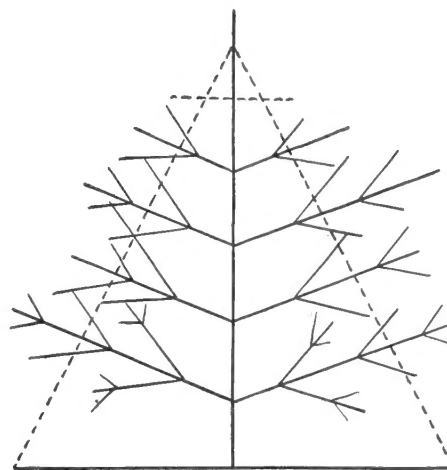


Diagram showing proper method of pruning or shearing for more beautiful Christmas tree. Prune to a cone shape, roughly as indicated by dotted lines. Top should be trimmed shorter than would make a perfect cone, as this main shoot has a tendency to grow much faster than the side branches.

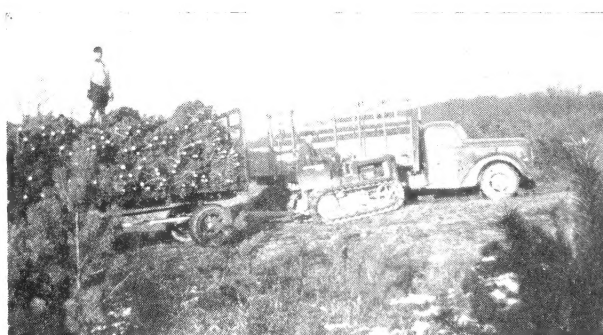
leaving the remainder to grow into timber. This 50% may be cut over a period of three or four years, but in that time you will have several tracts to cut over.

Marketing

Your particular marketing conditions will determine the manner in which you will handle your cutting operations. Some growers merely market their trees on the ground. The customer selects his tree, you cut it and he takes it home. Or you may sell trees on the stump to a dealer who comes in and cuts his trees. If you retail your trees on a lot or sell in small amounts to other dealers, the cut trees may be transported loose on a truck or wagon. However, if you intend to ship trees or truck them long distances, they should be baled. This amounts to tying several trees together, and binding the branches down flat on the main stem. This allows many more trees to be loaded in the same space, and tends to protect them from damage and breakage while handling them. Many ingenious devices have been constructed for aiding in tree baling, but as yet none have been placed on the market.

Marketing a Christmas Tree crop must be done within about four weeks of the year. Conditions vary somewhat throughout the country, but usually you can expect a strong market for your product. You will no doubt have competition from "shipped in" wild trees, but experience has shown that planted trees sell when others do not. They also command a much better price throughout. This fact is very obvious when you compare the quality of the two types of tree.

Address questions regarding Christmas Tree Cultivation to MUSSEY FORESTS, INC., INDIANA, PA. We shall be glad to help you with your problems in any way possible.



Bundled trees leave plantation by truck and tractor. Standing trees will be left for timber.

Whether you plant one acre in trees . . .
or one thousand acres,

It pays to **PLANT THE BEST**

If planted under the proper conditions, 85% to 95% of Musser Cultured Tree Stock will grow to maturity and return an excellent profit on your investment in seedling trees, in labor, and in land.



Constant weeding of seedling trees is necessary to permit full development of Musser Tree Stock — a painstaking task, necessarily done entirely by hand.



Four-year-old American Red Pine Plantation. As can be seen, practically 100% of the Musser Trees planted in this area are maturing. In two more years, Christmas trees will be thinned from this plantation.

times over), the remaining trees will be left with room to develop to full maturity. They will grow into much needed timber which will increase in value by at least \$10 per acre per year. Thus a 15-year-old tract should be worth \$150 per acre, and a fully grown 30-year-old planting, \$300 per acre.

We know that these figures are accurate for Musser Cultured Stock, because for the past 22 years we have put out plantations on our own land, and have verified the facts. Cheap planting stock will not give the same returns.

Yes, it pays to PLANT THE BEST!

Musser Forests, Inc.

Growers of

Northern Grown Evergreen Nursery Stock

Indiana, Pennsylvania

OFFICE:
515 Philadelphia Street
Phone 422

NURSERY:
7 miles north of Indiana, Pa
Phone 4122 - 14



Thousands of AMERICAN RED PINE Seedlings in nursery beds at the Musser Forests Nursery. We believe this to be the finest stock in the country.